

ABSTRACT OF THE DISCLOSURE

A print head provides for multi-level printing with colorants of different densities without print head replication. A continuous ink jet printer includes a plurality of ink sources; a print head connected to multiple ink sources; and apparatus adapted to selectively transfer ink from each of the connected
5 sources to the print head or to block such transfer. The nozzles selectively create a streams of ink droplets having a plurality of volumes. The apparatus also includes a droplet deflector having a gas source to interact with the stream of ink droplets, thereby separating ink droplets into printing and non-printing paths. The apparatus includes a print heads which can be switched between "light" and "dark" ink
10 sources. This allows multi-level printing, thus achieving higher print quality at the same resolution without incurring the costs associated with additional dedicated print heads.